

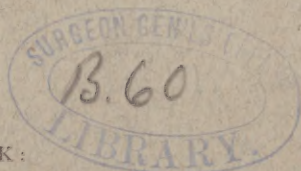
Bulkley (L.D.)

ON THE
RECOGNITION AND MANAGEMENT
OF THE
GOUTY STATE
IN
DISEASES OF THE SKIN.

BY L. DUNCAN BULKLEY, A. M., M. D.

*Physician to the Skin Department, Demilt Dispensary, New York; Attending
Physician for Skin Diseases at the Out Patient Department
of the New York Hospital, Etc.*

REPRINTED FROM THE AMERICAN PRACTITIONER, NOV., 1877.



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1877.

With the Compliments
of L. D. Bulkley M.D.
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In the present paper I desire, from a clinical stand-point, to impress upon my hearers the value and necessity of recognizing and treating the gouty state in many diseases of the skin. I say from a clinical stand-point, because many of the thoughts here given have come to me gradually, as developed by experience, and I wish that others may accept at once what I have been slow to perceive clinically. In an analysis of one thousand cases of skin disease in my private practice, now in process of preparation, I have been struck, on reading over the recorded histories, with the constant occurrence of the elements of gout either in patients themselves or in their immediate connections, and also with the very important part which the management of these elements has played in the cure of the cutaneous disease. I am also led to consider this subject in writing, be-

.Read before the American Medical Association, June 7, 1877.

cause in very many, if not in most instances, this gouty state had been neglected by the physicians previously in charge of the cases, and because even when I have called attention to the subject many have failed to recognize the facts or the importance of their bearing upon the case; but of the reality of the connection, in many instances, I have not a shadow of doubt, and of the therapeutical importance of the recognition I am very firmly convinced.

I may say, however, that it is often difficult to recognize these elements in poor practice, as in hospitals and dispensaries, probably because they do not exist to so great a degree among patients applying to such institutions as among the higher classes, for the reason that the causes, such as over-eating and wine-drinking and indolence, are not conspicuous elements in the life of the middle and lower classes in this country. I may also add that considerable difference in the type of diseases, including those of the skin, is observed on careful study between those seen in private and those in public practice in a large city like New York; the same probably exists in other cities, which may in a measure account for discrepancies of opinion and fact, on the part of some, in regard to certain of the points brought forth hereafter. The same is true in other branches of medicine than dermatology, according as the observations are based on cases seen among the rich and better-to-do classes of society, and in the humbler and lower walks of life. As before remarked, the present paper is written with especial reference to cases occurring in private practice and among those who enjoy some or many of the luxuries of life, often wrongly so called.

It will be understood, of course, that no claim is made to a *discovery* of the influence of the gouty state in skin diseases, the connection has long been recognized by the French school of dermatology especially; but I wish to bring it more particularly to the notice of the profession in this country, upon a basis of large clinical study of recorded cases of patients in public as well as in private practice.

To a proper understanding of what is implied by the influence of the gouty state in diseases of the skin, it will be well first to define what is understood by the term "gouty state." When gout is spoken of, the unprofessional mind has at once suggested to it an exceedingly painful inflammation of one or more of the smaller joints of the extremities, notably that of the great toe. The physician who has given but little thought or study to the subject, at once remembers that gout may affect any of the organs of the body,—that there may be gout of the kidney, heart, liver, brain, etc. He who has gone somewhat more deeply into the subject recognizes that these are all but the phenomena resulting from a blood alteration which has been demonstrated, and that the presence of uric acid in the blood is the root of the evil, the attempted oxidation of which in the tissues gives rise to the local inflammations.

But if the phenomena of gout are not studied or observed further even than this, we will fail to note the connection which exists between the gouty state of which we speak and functional and other diseases of the system. The true student of the gouty state must go deeper into its pathology than the simple existence of inflammation of the joints, or of the internal organs of the body, and even deeper than the acid blood-state which is recognized as the foundation of these; he must seek for the causes of this state of the blood; he must search for the earlier manifestations of the blood alteration, which may be discovered a great while before the joints or viscera are inflamed or altered; he must recognize the elements which form the beginning of the long train of cause and effect which eventuates, if its course is unchecked or unchanged, in what is commonly known as gouty inflammation. The earlier links in the chain are quite as important as the late, or rather are much more important therapeutically, inasmuch as it is during this period that, by a proper regulation of the patient's life, with slight medication or by the "*management of the gouty state*," as the term is here employed, that we may do much to avert an evil which will surely come

if the earlier warnings, of more or less severity, are not heeded and acted upon. It is in this light that I look upon many of the cutaneous and mucous inflammations (for the mucous membrane is but the involuted skin) which often long precede the commonly recognized symptoms of gout; and I would no more neglect the warning given by them to the patient, and attempt to remove the eruption by local means alone (even were this possible), and thus fail to seek for the cause and remedy of his gouty state, than I would shoot a railroad employé who waved the red flag of danger before the open draw-bridge, because his presence was distasteful to me and checked me in my homeward journey: the caution-signal may avert a great danger.

Our subject, then, divides itself into three parts:

First. The importance of recognizing certain skin diseases as the earlier manifestations of the gouty state, with a view of saving the patient from its later exhibitions, which are worse and may ultimately endanger life.

Second. The importance of recognizing the gouty state in certain diseases of the skin, because thereby we can best remove the cutaneous disease and prevent its recurrence; and,

Third. The management of the gouty state, especially in its earlier periods, during which the skin lesions are most apt to manifest themselves.

I am aware that there are some who deny, almost if not quite *in toto*, the internal causation of all diseases of the skin, and regard them wholly of local origin, either as the result of external causes or as local affections of the skin tissues. At the late meeting of the International Medical Congress at Philadelphia, in September last, one of the questions for discussion was, "Are eczema and psoriasis local diseases, or are they manifestations of constitutional disorders?" and the present writer was honored by the invitation to read a paper on the subject. During the subsequent discussion the side of the local pathology of these diseases was warmly advocated by several gentlemen familiar with diseases of the skin, but

the Section, or medical jury before which the case was argued, decided in favor of all the propositions offered by the writer, which showed the constitutional relations and nature of these affections; the main arguments brought forward in favor of this were based on their relations to the gouty state as understood in the present paper. I confess that I can not understand how this influence could have been so ignored as it has been by local pathologists, for surely a careful study of recorded private cases in sufficient numbers can not fail to convince the most skeptical of a very frequent coëxistence of many diseases of the skin and the phenomena now recognized by the best authorities as gouty, and a careful following out of the cases on paper, visit by visit, certainly shows that as one set of symptoms improve, the others commonly do the same, and *vice versa*; and that remedies affecting the one are of influence over the other. Unless the converse of our propositions can be demonstrated by an equal or greater number of recorded clinical facts as perfect in every respect, the opinions which have long ruled the medical mind and have been demonstrated again and again, in reference to the constitutional relations of certain cutaneous affections, must be accepted as true, and the dictum of any one school of dermatology can not decide the question to the contrary.

It will be understood, of course, that my remarks in regard to the gouty relations of dermal lesions do not refer to every disease of the skin: I recognize purely local affections, as epithelioma, also the parasitic diseases, vegetable and animal, the contagious exanthemata, syphilis, purpura, etc., as being independent of these relations in the main, although I believe that the earlier and lighter systemic changes which contribute to the gouty state, may predispose the entire organism even to local diseases, which the perfectly healthy may escape.

Turning now to the more immediate consideration of our subject, what are the elements which comprise the gouty state, which we are to seek for and recognize as of importance in connection with diseases of the skin? They may be classed under two heads, imperfect assimilation or nutrition, and im-

perfect disassimilation or disintegration, by these two processes growth and repair are carried on and effete products removed; failure in one or both of these is a primary factor in the gouty state, and must be remedied, wholly or partially, to avert the ultimate results sure to follow. The management of the gouty state, then, includes a study of the elements of secretion and excretion, as also of the process of tissue disintegration which is continually taking place; the pathological culminating point of the latter is best seen, perhaps, in acute articular gout, where the tissues undertake to perform the vicarious office of oxidizing uric acid, which they succeed in doing only to the immense damage to themselves.

It will be necessary, therefore, in the study of our subject, very briefly to consider the functional disorders which constitute or contribute to the production of the state called gouty, namely, the derangement of the organs engaged in secretion and excretion—the liver, stomach, intestines, pancreas, kidneys and skin. Space forbids our entering into the consideration of the normal and pathological workings of each of these (even if it were possible to isolate entirely their action in health and disease), and, having named them as important factors to be regarded in the gouty state, especially in its relations to certain diseases of the skin, I will dwell for a moment on the more commonly recognized manifestations of disordered assimilation and disassimilation. The points to be considered are, imperfect digestion, constipation and diarrhœa, imperfect urinary secretion, and faulty cutaneous action.

Imperfect digestion, indigestion or dyspepsia, represents a failure in the process of the preparation and assimilation of the food by the various organs, alone or combined, which are charged with the function of ministering to the nutrition of the body. If patients with skin diseases are asked whether they have indigestion a considerable number will say that they have not, although some proportion of them will answer that they have, meaning thereby that they suffer from some of the forms of primary indigestion which obtrude themselves upon the attention, in ways that are decidedly uncomfortable.

Thus, the most commonly recognized symptoms of dyspepsia, pain after eating, or the feeling of a heavy load in the stomach, heart-burn, nausea, acrid or fetid eructations of wind or liquid, are familiar to many, and may or may not be mentioned by the patient if they exist. But it is a mistake for the physician to suppose if these are absent that the patient has no indigestion; and it has been the failure to recognize this fact, and to search for deeper proof, which has led to the neglect of the internal pathology of diseases of the skin.

Imperfect digestion is shown quite as plainly by other elements as by those recognized by the laity as connected with it; and what I wish now particularly to direct attention to is the connection between many of these symptoms and functional derangements of the liver, as insisted so forcibly by Dr. Murchison.* I can not do better than to quote his list of symptoms of indigestion, as more commonly observed:

“1. A feeling of weight and fullness at the epigastrium, and in the region of the liver.

“2. Flatulent distension of the stomach and bowels.

“3. Heart-burn and acid eructations.

“4. A feeling of oppression and often of weariness and aching pains in the limbs, or of insurmountable sleepiness after meals.

“5. A furred tongue, which is often large and indented at the edges, and a clammy, bitter or metallic taste in the mouth, especially in the morning.

“6. Appetite often good; at other times anorexia and nausea.

“7. An excessive secretion of viscid mucus in the fauces and at the back of the nose.

“8. Constipation, the motions being scybalous, sometimes too dark, at others too light, or even clay-colored; occasionally attacks of diarrhoea, alternating with constipation, especially if the patient is intemperate in the use of alcohol.

*On Functional Derangements of the Liver. Croonian Lectures for 1874. London, 1874.

"9. In some patients attacks of palpitation of the heart, or irregularity or intermission of the pulse.

"10. In many patients occasional attacks of frontal head ache.

"11. In many patients restlessness at night and bad dreams.

"12. In some patients attacks of vertigo or dimness of sight, often induced by particular articles of diet."

Other symptoms must be added to these, which are quite as definitely the result of imperfect digestion, or of the state of blood, called by Murchison *lithæmia*; many of them he subsequently mentions. Such are, the constant tendency to aphthous sores of the mouth and tongue, recurrent herpes labialis, also hemorrhoidal congestion, with external or internal piles and pruritus of the anus; a slow and sluggish pulse; chronic bronchitis and spasmodic asthma: these are all constantly seen to be entirely dependent upon the gouty state. Sleeplessness and restlessness at night are not at all infrequent indications of this state and of imperfect digestion. And here I can not do better than again to refer to Murchison, whose clinical observations in the admirable little book mentioned I have verified again and again, indeed daily in practice as well as in my own person. And I may remark that the book is written in the most fascinatingly truthful style, and shows the careful observer throughout, and in many instances gives the impression almost of a personal narrative. I know of no medical work of its size so instructive, and would urge all who desire to enter more into the details of the matter here presented, not only to refer to the book but to study and digest it; it will not produce mental or physical indigestion in the reader, as do so many modern writings, but if thoroughly masticated and assimilated will help many to benefit and cure the dyspepsia of others, and their own, if they have any.

In reference to this sleeplessness, Murchison recognizes that it may arise from many causes, but believes that "one of its causes is the derangement of the liver which produces lithæmia." Says he:—"When this is the case, the patient is often heavy and drowsy after a full meal, and he may fall

asleep at once on retiring to rest; but after one, two, three or four hours, he awakes and then he lies awake for hours, or he is constantly falling asleep, dreaming or having the nightmare and awaking—four or five times, or even oftener, in the course of one hour—until the morning comes, when he drops into a quiet sleep of an hour or more; or he is obliged to get up, tired and irritable. This sleeplessness like the vertigo . . . is often induced by particular articles of diet, or by some unwholesome combination of them. What will excite headache, giddiness, or disorders of the circulation in some patients, will in another cause sleeplessness. Sometimes, however, this symptom will occur when the patient is most careful as to diet. What is important also to note is, that in most of these cases there are no obvious symptoms of gastric dyspepsia; the appetite may be good, too good in fact; the bowels may be regular, and there may be no pain, flatulence, or other discomfort after meals; but there will be found an unusual tendency to the deposit of lithates in the urine, and very often other phenomena of a so-called gouty diathesis.

. . . It is, however, a form of sleeplessness not generally understood, and harm is often done to patients suffering from it by the administration of opiates and other soporifics, from ignorance of its real cause. Very often the symptom will be greatly relieved, if not entirely removed, by careful attention to diet. . . . Some patients with this form of sleeplessness have told me," says Murchison, "that they never sleep so well as after a dose of calomel or blue pill."

The present writer has observed this form of sleeplessness very commonly in patients affected with diseases of the skin, especially among children, and far oftener in the latter than he had any reason to expect from previous teachings on the subject; and it was long before the true nature of the sleeplessness was discovered, and then mainly by the failure of local treatment to remove the skin difficulty, or to give sleep by affording relief to itching, where it existed.

But I have delayed far longer than was intended on this portion of the subject, and will briefly mention the other ele-

ments which must be looked for as indicative of the gouty state, or of a tendency to its development in patients with diseases of the skin.

Occurring spontaneously, or dependent more or less on wrong action of other organs, the intestine may fail in its action, either by deficient excretion into its cavity, or by tardy and imperfect movements and delayed expulsion of its contents; the former being costiveness and the latter constipation. Of course there are many causes of this failure; much of it is primary, some is secondary to the gouty state already developed: its continuance is certainly productive of this and many evils, and it is of vast importance to properly manage the functions of this great excretory organ, the extent of which importance is hardly sufficiently comprehended.

Far too little attention has been paid to the skin as an excretory organ, and to its condition and circulation as indicative of the health of the economy, and to the maintenance of its proper action as an element of health. The general surface of the skin affords very clear indications of the beginning or existence of the gouty state. All are familiar with the sallow, unhealthy look during the existence of what is known as "biliousness," whose oft repeated recurrence ends in chronic lithæmia; and also with the clear, translucent skin of those in whom the gouty state is so far advanced as to result in joint inflammation: the imperfect cutaneous circulation, manifested constantly by cold, clammy hands and feet, even in summer, is also recognized as resulting from digestive disturbance; and in the later stages of the gouty development we have the inactive skin, shown in a dry condition, seldom perspiring, with frequent sensations of chilliness and frequent "taking cold" on slight exposures. All these conditions I have daily recognized in patients suffering from many affections of the skin.

The clearest, and in some respects the most satisfactory, element in the establishment of the existence of the gouty state in patients with diseases of the skin, is furnished by the urine. It has been claimed by opponents to some of the views inculcated in this paper that nothing has been proven in

regard to any relations of the urine to diseases of the skin, because the changes found in the urine of patients with cutaneous affections are only those existing in others in whom there is no disease of the skin. This is not the time nor the place to enter into any discussion of the question, but I would simply ask of the objectors what changes could or should be expected in the urine? Certainly we would not expect to find any new elements, for the constituents of the urine are capable of undergoing but a comparatively few changes, and these occur pretty definitely under definite conditions. Now it is precisely this that I wish to establish in the matter, namely, that many of the diseases of the skin are associated with and measurably dependent on the presence of the gouty state, and the existence of that gouty state is demonstrated by the state of the urine in most if not in all cases. It is understood, of course, when I speak of changes in the urine, that I recognize them not as the result of kidney disease, but as indications of the blood state.

The changes which the urine undergoes in acute articular gout are well known and very definitely established: these are, the diminution of all the chief ingredients as the paroxysm approaches, the diminished quantity without proportionate increase in specific gravity during the inflammatory attack, and, as it passes off, the appearance of urates or lithates in the urine, generally in great abundance. In the minor or earlier period of the gouty state, the stage in which most of the cases of this class of diseases of the skin are observed (for they are not nearly as commonly met with as would be supposed in those who have gone so far as to have articular gout), in the earlier stages or phases of the gouty condition we have changes in the urine which foreshadow those which will follow if the same causes continue to work. Thus, early in indigestion we find oxalate of lime beginning to appear, with urates and occasionally uric acid, at first with each attack of functional derangement of the chylopoetic viscera: as these derangements become more frequent and oft-repeated, the changes are more and more common, until they become the estab-

lished condition of affairs, and the urine, instead of presenting the normal characters, exhibits the microscopic sediments as a rule, with alternating high and low specific gravity, or a persistent high specific gravity and abnormal acidity.

Now a very considerable number of examinations of the urine in private practice* have demonstrated to me that much the same conditions exist, as a rule rather than as an exception, in the urine of very many patients affected with certain diseases of the skin; it is further established beyond doubt, in my mind, that such digestive derangements as have been mentioned, and which are associated with alteration in the urinary secretion, act as aggravating elements in diseases of the skin, and that therapeutical deductions in regard to the latter may be learned from the state of the urine.

This complex state, then, is imperfect digestion, the all-important factor in the gouty state, and such are the elements of ill health which are to be sought after and remedied if it is desired to do permanent good in such diseases as acne, eczema, furunculi, lichen, psoriasis, urticaria, etc.: I say sought after, because few patients will imagine that these ailments have any connection whatever with the eruption with which they come for treatment, which generally causes them far more distress than do the other indications of the gouty state.

The points thus far considered may be recapitulated as follows:—First, the gouty state is recognized as an important element in the causation and continuation of many diseases of the skin; second, by the gouty state is not intended merely the presence of articular inflammation, but the existence of a blood state which is the cause of many other symptoms besides inflammation of the joints, which are equally indicative of the gouty habit or condition; third, the elements of the production of this blood state are found in wrong diet and imperfect digestion, including assimilation and disassimilation, as evidenced by functional derangements of one or many of the abdominal viscera, or of the entire integument.

* Archives of Dermatology, October, 1876, p. 1. Reprint:—G. P. Putnam's Sons, New York.

We are now prepared to notice, for a moment, the three important points in reference to this study which were alluded to in the beginning: First, the importance of recognizing certain skin diseases to be the earlier signs of the gouty state, with a view of saving the patient from the worse and more dangerous manifestations. If diseases of the skin are recognized to be thus connected, it becomes the duty of the physician to look for the cause and remove it, quite as quickly as it is his duty to guard the patient who has had one attack of gout of the toe from its recurrence, and to endeavor to protect other organs from the influence of the poison: this is to be done by so altering the life and habits of the individual that the acid production ceases. Skin diseases of certain varieties are thus seen to be of much more importance in medical pathology than has sometimes been granted, or than some even to-day agree; and the physician's duty is not always ended when he prescribes a local remedy for every case of skin disease, simply for the purpose of giving relief to the immediate symptoms present. Quite as improper is the indiscriminate use of arsenic, just because the skin is affected, some of the errors in the use of which, as also some of the benefits resulting from its proper employment, I had the honor to lay before this learned body one year ago.* On the occasion of the occurrence, then, of the diseases of the skin which are recognized as connected more or less with the gouty state, it is the duty of the physician to go carefully over the entire case, to seek the elements of ill-health and to remedy them, not only because the skin affection is thus benefited, but because the signal-flag of danger thus placed in plain sight should not be disregarded.†

* On the Use and Value of Arsenic in Diseases of the Skin. Transactions of the American Medical Association, Vol. XXVII, p. 163. Reprinted. New York: D. Appleton and Co. 1876.

† It will be understood, of course, that I do not by this intend to support in the least the popular (and semi-professional) idea that there is any danger of "driving in" an eruption: such a thing is simply impossible, the educated physician of to-day does not hesitate to remove any eruption as soon as possible. I only claim that best interests demand a coincident attention to the general health.

But, Second, it is important to recognize the gouty state in certain diseases of the skin, because it is well nigh essential to do this in order to obtain permanent effects in treatment. This point I can not dwell on now; it will be developed more fully under the next subject, the management of the gouty state in skin diseases. It were possible, however, did space permit, to give very numerous examples where local treatment, of the most varied and approved character, failed to give any results until gouty elements were removed; also where iron, arsenic, cod-liver oil, etc., seemed but to aggravate the disease before attention was paid to the elements dwelt upon in this paper.

We come now to the third and most important portion of our subject, namely, the Management of the Gouty State in Diseases of the Skin. I have used the word "*management*" instead of treatment, because, as its elements of causation are manifold and extend into the habits of life of the patient, its removal requires something more than routine *treatment*, or the prescribing of this or that drug: it requires a thorough investigation of the errors of life and their rectification, as far as possible. The latter is accomplished first by diet, second by hygiene, and third by medicine, whose importance is in the order of their mentioning. First as regards diet.

By dieting is popularly understood a starvation process, which is to be continued for a short time, for the purpose (even if it is not avowed) of starving out the disease. Diet, as understood by the intelligent physician, is such a regulation of the quantity and quality of the nourishment taken, its mode of preparation, and manner and time of consuming, as shall conduce to the restoration to health of functionally or organically diseased organs, and to the maintenance of health: in this its broadest sense should it be considered in the management of the gouty state, especially as observed in connection with diseases of the skin.

First, then, as to quantity: It must be acknowledged that overeating is far more common among the better classes of society than under-eating, and a study of my recorded notes

of private patients shows continual proof of the fact: they frequently say, in answer to the question if they have dyspepsia, that they are not troubled unless they "eat too much." Clinical investigation will convince every one that much of the indigestion existing is very commonly the result of habitually taking just a little more nutriment than the system requires; and that extra amount is more commonly in the way of desserts, or griddle-cakes, or salad, etc., which tempt by their delicate flavor.

Few persons discriminate between appetite and taste, and because there is still a relish for sweets, etc., long after the healthy appetite has been satisfied, they indulge in them, and the digestive system is taxed far beyond its true capabilities. From this one of two errors must result, the lesser one when the stomach rejects the load, or passes it partly digested into the intestines, giving rise to a diarrhœa; or a worse result happens, when there is an attempt to assimilate the entire quantity, which ends in but a partial digestion of the whole, and as a consequence we have imperfectly altered substances circulating in the blood, which appear in the urine as oxalate of lime, urates, uric acid, etc., the early stage of the gouty state. As remarked, the first result of the rejection by the stomach or of an irritative diarrhœa, is the lesser of the two evils: tradition says that the Chinese take emetics to enable them to over-eat again, whereas gourmands among the more civilized nations think that the "dinner-pill" or a mineral water furnishes a more elegant method of avoiding the ill effects of their folly and crime. Hence, the entire quantity of the food must be properly regulated, and such elements as stimulate unnatural appetite must be avoided, as condiments, etc.: this is also one of the evils of the use of wines at meals.

But the entire quantity of food may be normal in amount, and some of its individual articles may be in excess or in default: this is most plainly seen in such diseases as scurvy and rickets, but is equally true in regard to other states. One patient indulges very largely in saccharine and starchy food, another takes meat in excess, a third, especially among the

strumous, takes little or no fat: to the proper management of the gouty state these matters of diet require to be regulated by the physician, for man is so influenced by surroundings that instinct has little to do even with the more animal portions of his economy. We have not the time to enter further into the matter of diet in this place, but can only throw out the warning that unless it is studied by the physician to whom the patient with functional derangements which will result in the gouty state has applied, in many cases he will not be able to cure the skin disease, and will fail of his duty in regard to the future health of his patient.

One further point somewhat in this connection must be mentioned, and that is the proper mastication of the food. The process of digestion undoubtedly commences in the mouth, and an imperfect performance of the work allotted to this portion of the digestive tract must throw extra work on other portions, and result in imperfect digestion. I find that many of these patients eat very hastily and chew their food very imperfectly. I may also mention the use of very cold liquids during eating, and also the use of much fluid of any kind, as prejudicial to the proper performance of the digestive functions. Many unconsciously take large draughts of water, tea, beer, etc., while eating or soon after, to the detriment of their digestion, and perceive the benefit following a diminishing of the amount. I usually advise those exhibiting elements of the gouty state to take not more than one-half of the accustomed amount of fluid during or near the meal, making up the deficiency, if more liquids are craved, with water in the intervals between eating, not sooner than half an hour before or two hours after the meal. I have for several years advised copious draughts of ordinary water on rising and on retiring, in the gouty state, and am pleased to find that the same has been practiced by so high an authority as Sir James Paget, of London, as recently mentioned by him in print. Soup at meals I hold to be, in many instances, a great error of diet.

In regard to the use of wine, ale, alcohol, etc., in the early or late stages of the gouty state, as seen in patients with skin

diseases, they are to be interdicted even to the severest degree, it being indeed impossible to overcome the acid production, in many instances, when they are indulged in: there are exceptions, of course, to this as to every rule. The degree of their harmfulness, I believe, may be expressed by the order in which they stand in the following list, the most injurious coming first: porter, ale, madeira, port and sherry wines, champagne, cider, lager beer, claret, hock, and the very light white wines, brandy and whisky. Thus, it is not the alcohol which is harmful as much as it is the sweet, fermentable and fermenting principle contained in wines, beer, etc. If stimulants are really required, I prefer to supply the need by the bitter infusions or tinctures, or quinia.

In conclusion of the subject of the diet in these cases, I would affirm that the person with a gouty state, even in its earliest developing stage, should regulate the diet to such a degree that but little if any medicine is required, except as an occasional adjuvant, when unusual and unpreventable causes operate to cause special derangement in the functions of the organs. Food should be taken, if necessary, more often than common, in order to prevent overloading the stomach beyond easy digestion at any one time. All articles of known difficulty of digestion should be sedulously avoided, such as nuts, cheese, pickles, pastries, fried articles (of which fried oysters and egg-plant are the type of what is evil), gravies, sauces, hot bread, cakes, etc., together with such fruits as bananas, pine-apples, cocoa-nuts, also such vegetables as sweet potatoes, cabbage, etc. Finally, there is no field which should receive so much attention from the physician, and yet which does receive so little, as the matter of the selection and preparation of the food and drink which form the frames which we try, so often vainly, to influence beneficially by medicines. I trust that those who may become interested in this subject, in connection with skin diseases, will look it up elsewhere and study it clinically.

But of almost, if not quite equal, importance in the management of the gouty state in diseases of the skin, is the mat-

ter of hygiene: under hygiene I include exercise, bathing, sleep; occupation, light, air, etc.

The majority of those affected by the gouty state are of more or less sedentary habits, and there is hardly any point which will be so hard to manage as the matter of exercise in these patients. Simply to advise them to "take plenty of exercise in the open air" will not suffice, for the judgment of the patient may differ materially from that of the physician as to what is implied thereby; the subject must be seen to and followed out if any results are to be obtained.

It was stated before that inactivity of the skin was an important element in the gouty state of skin patients, and to remedy it will often require considerable attention. Cold sponge bathing and sharp friction after it, every morning, is a very valuable aid in this. Dr. Todd recommends the addition of nitro-muriatic acid to the sponge bath. Turkish baths very often assist greatly, and are of advantage, once a week or so. I have also seen very excellent results in skin diseases which even were quite local in character, in those of gouty habit, from the use of full, long, warm baths, rendered moderately alkaline, say by the addition of carbonate of potash, carbonate of soda and powdered borax together, three, two and one ounces of each respectively, in a thirty gallon bath, at a temperature of from 85° to 92° Fahr. This may be taken two or three times a week, on retiring, remaining in the water from fifteen to thirty minutes.

The sleep, hours of retiring, etc., as also the apartment, should be attended to; likewise such matters as the light and air enjoyed by the patient, and also his occupation, should not escape the physician's attention.

All these matters may seem of trifling importance, and not worthy the regard of educated men, but I believe that in treating chronic diseases we must look to chronic causes, and nothing which can conduce to the health or ill health of the patient should be neglected by his medical adviser. We all know of the importance of these items in cases where the tuberculous habit has been acquired or inherited, and in these

instances attention to them is often of the greatest benefit to the patient. I hold that the gouty state may develop conditions equally dangerous, certainly to the future health, vigor, and usefulness of the patient, and that these points should be equally attended to in this state.

Having now considered the two most important elements in the management of the gouty state in diseases of the skin, namely, diet and hygiene, we can very briefly complete this study by a mention of the drugs which may be relied on to assist in the work. Functional derangement of the abdominal organs, causing faulty assimilation and disintegration, was mentioned at the outset as being the foundation of the gouty state, and to relieve the condition we must reach them with appropriate medication. There can be little or no doubt but that the views so ably put forth and sustained by Murchison, in regard to the very important part which functional derangements of the liver play in the production of the gouty state are the correct ones, although in the excellent little work alluded to perhaps prominence is given to it to the undue neglect of the part played by the other organs engaged—the stomach, pancreas, intestines, etc.

Unquestionably the proper use of the right cathartics is of great service in the treatment of the gouty state, and foremost among these stands mercury. The old remedy of five grains of blue mass, five of the compound extract of colocynth, and one of ipecac, given in two pills, and repeated on the second night, is one of the very best agents we have to give relief to the portal circulation. I not uncommonly allow this dose to be repeated on the following week, and when the gouty state is pretty fully established, the course may be taken at weekly intervals or longer. A very common and valuable remedy of mine for the more permanent relief of the constipated habit, is the use of pills of the extract of aloes with a little dried sulphate of iron, with or without the extract of *nux vomica*. These are to be taken *regularly*, directly after the meals, at first thrice, then twice, then once daily, and ultimately patients who before have been habitually constipated have been able

to reduce the number to one taken *regularly* at stated intervals, of several days or a week, or to discontinue them. There are, of course, very many valuable methods and ways of overcoming constipation, which can not be mentioned here; of the value of the two preparations just referred to the writer can speak from large experience in their use.

Next to overcoming constipation, the primary digestion demands most careful attention in the management of the gouty state in diseases of the skin. Want of space forbids more than the briefest notice of this subject; the remedies suitable to relieve digestive disorders are too numerous even to mention. I will, however, call attention to lactopeptine, which, taken repeatedly after each meal, is often of the greatest service in assisting proper diet in this matter; sometimes the mineral acids and sometimes the alkalies are of value, according to the requirements of the case, which can not here be dwelt upon.

As before mentioned, the urine affords the most serviceable means in our possession of discovering the existence and watching the progress of development of, or the disappearance of, the gouty state, and the constant and repeated examination of it should never be neglected. The skill and care necessary for this are attainable by all, and the apparatus is not expensive; for the details I must, of course, refer the reader to one of the many good books on the subject. I find that patients are willing to pay for the extra time and work necessary, when made aware of the importance of this matter.

Watching, then, the quantity of urine passed, its specific gravity and acidity, the presence or absence of deposits, the occurrence of albumen and sugar, or the phosphates thrown down by heat and dissolved by nitric acid, and, microscopically, the oxalate of lime, the urates and uric acid, we can determine with a very certain amount of definiteness whether the gouty state is on the increase or decrease, or at a standstill, and can vary our medication, diet, etc., accordingly.

The remedy which I use more than any other in overcoming the acidity of the gouty state in diseases of the skin is acetate

of potassa, given pretty freely, from fifteen to thirty grains three or four times daily, generally on an empty stomach and well diluted. When there is more primary indigestion and stomach acidity, I order it to be taken after eating and with less water, say a wine-glass or so, in a bitter infusion, as of quassia or columbo. A very valuable method of accomplishing the same is by the frequent use of Kissingen water, or Kissingen and Vichy mixed. I give the former, drawn from a syphon bottle, three, four or more times daily, in small quantities, a quarter to half a gobletful at once, on an empty stomach; that is, not sooner than half an hour before or two hours after a meal. I prefer the mineral waters manufactured in this country, especially those of Dr. Hanbury Smith, of New York, and use far more Kissingen than Vichy. Lithia, in its various combinations, is a most excellent remedy for meeting the gouty state, and one which I very frequently employ. I have commonly used the benzoate, although the carbonate and citrate are very good; it should always be given after eating. The salts of soda are far inferior to other alkalies in overcoming the gouty state, although they afford much temporary relief to pressing symptoms; magnesia I use more or less, as particular cases require.

I have thought that acetate of ammonia has served me much good purpose in many cases of the gouty state in diseases of the skin, on account of its action on the cutaneous surface. Certainly skins, which before were dry and harsh, and perspired little if any, became soft and moist under the use of the acetate of potash dissolved in the liquor ammoniæ acetatis, the mixture being given three or four times a day: this is of special service in infants and children. Jaborandi promises to be of service in meeting and overcoming the inaction of the skin in the state under consideration.

Iron is an oxidizer, and when it is well borne by persons in a gouty state it aids assimilation and improves the tone of the system; but very frequently it can not be taken with advantage by these persons, except alternated or combined with

alkalies or aperients.* The muriated tincture of iron is one of the most serviceable forms in which to give it; when it is desired to administer alkalies with iron, the ammonia-citrate is about the best preparation to employ. Arsenic is also a promoter of the assimilative process, but must be given with even more caution than iron to persons in a gouty state, and patients taking it must be watched, especially with reference to the condition of the urinary secretion: when this is faulty, arsenic will be pretty certain to do no good, or to do positive harm. I like very well the acid De Valangin's solution, which I frequently give alone or in combination with the muriated tincture of iron. But this is a powerful remedy, and in one instance its use induced a gouty attack in a lady predisposed to many of the manifestations of the gouty state, and when this attack passed off a return to the remedy was followed immediately by another aggravation of the gout.

The management of the gouty state, as observed in certain diseases of the skin, may be summed up somewhat as follows: In the early stages of the systemic changes recognized as tending to the production of the gout, more is to be expected from diet and hygiene, exercise, bathing, friction to the skin, etc., with the occasional use of the milder alkalies and laxatives, such as mineral water, judiciously used. In the later stages, where the more commonly known manifestations of gout have already developed, and where the acid blood state is fully formed, the management must embrace the measures serviceable in ordinary gout, including diet, hygiene and medicine, if sure or permanent relief is expected to the disease of the skin, which is one of its manifestations.

I have said nothing in reference to colchicum in this connection, because I have had no very great personal experience to offer in regard to it. I have thought that I have seen considerable benefit from it in certain cases of chronic urticaria

* Since the above was written and read, an excellent paper by Dr. Fothergill, on "When not to give Iron," has appeared in the *London Practitioner*, September, 1877, p. 183; and I am pleased to see that this bright observer gives the same cautions, but expressed much more fully. I would refer the reader to that paper for a full consideration of the subject.

with acidity; but, on the other hand, my impression has been unfavorable in reference to it in some other affections of the skin, where it has been prescribed by practitioners who have seen the case before me: of its reputation in well developed arthritic gout, we are all well aware. I have also omitted mention of other methods, measures and remedies which have been recommended in the gouty habit, as I desire here simply to give practical expression to my experience clinically in managing this state in diseases of the skin.

I would like to have been able to add something definite in regard to the effect of climate in the development and cure of gouty skin diseases, but refrain from speaking on the subject until more data have accumulated, hoping however that others may be able to add experience on this subject. I am satisfied that certain affections of the skin depend largely on climatic influence, and believe that much of the benefit in them derived from a residence at mineral springs, etc., is due to the change of climate and surroundings, affecting favorably the gouty state, which is the foundation of many diseases of the skin.

